### § 45.61

- (i) When a lower deck is designated as the freeboard deck, that part of the hull which extends above the freeboard deck is treated as a superstructure so far as concerns the application of the conditions of assignment and the calculation of freeboard.
- (j) A bridge or poop is enclosed only when access is provided whereby the crew may reach accommodations, machinery, or other working spaces inside the superstructure by alternative means that are available at all times when bulkhead openings are closed.

# § 45.61 Correction for superstructures and trunks.

- (a) Where the effective length E of superstructures and trunks that meet the requirements of subpart D of this part is 1.0L, the minimum summer freeboard may be corrected by subtracting  $\frac{1}{2}H_s$ .
- (b) Where the effective length of superstructures and trunks is less than 1.0L the minimum summer freeboard may be corrected by subtracting a percentage of one-half of the standard superstructure height  $(H_s)$  determined by the formula:

Percentage=(E/2L)  $(1+E/L)\times100$ 

(c) To be eligible for the correction a trunk must—

- (1) Be at least as strong and as stiff as a superstructure;
- (2) Have no opening in the freeboard deck in way of the trunk, except small access openings;
- (3) Have hatchway coamings and covers that meet §§ 45.143 through 45.147;
- (4) Provide a permanent working platform fore and aft with guardrails;
- (5) Provide fore and aft access between detached trunks and superstructures by permanent gangways;
- (6) Be at least 60 percent of the breadth of the ship in way of the trunk; and
- (7) Be at least  $0.6\ L$  in length, if no superstructure, is provided.

## §45.63 Correction for sheer.

(a) The minimum summer freeboard must be increased by the deficiency, or may be decreased by the excess as limited by §45.65, of sheer calculated from table 4, multiplied by:

$$0.75$$
— $(S/2L)$ 

where S is the total length of enclosed superstructures. Trunks are not included.

### §45.65 Excess sheer limitations.

The decrease in freeboard allowed in §45.63 is limited as follows:

## SHEER CALCULATION—TABLE 4

Station	Actual or- dinate	S. M.	Product
After Half:			
AP		1	
L/6-AP		3	
L/3-AP		3	
Midship		1	
Sum of Aft Products			
After Standard Sheer .2665L+26.651			
Difference: Sum-STD			+Excess/ - Deficiency
AFT Sheer: Diff÷8			Excess/Deficiency
wd. Half:			
FP		1	
L/6-FP		3	
L/3-FP		3	
Midships		1	
Sum of Fwd Products			
Fwd Standard Sheer .5330L+53.301			
Difference: Sum-STD			+Excess/ - Deficiency
FWD Sheer: Diff÷8			Excess/Deficiency

<sup>&</sup>lt;sup>1</sup>L in Standard Sheer=L or 500 whichever is less.